

CLAIMS

1. A method for verifying an amount of a sample solution comprising the steps of:

(a) detecting at least one selected from the group consisting of a transmitted light component, a scattered light component and a reflected light component of a light by a photosensor while irradiating a sample solution, which is being injected into a sample cell, with said light; and

(b) verifying that a predetermined amount of said sample solution is held in said sample cell based on a change in an output signal from said photosensor.

2. The method for verifying an amount of a sample solution in accordance with claim 1,

wherein the step (b) is a step of verifying that said predetermined amount of said sample solution is held in said sample cell based on the fact that an absolute value of an amount of change in said output signal per hour is maintained at a first predetermined value or less for a first predetermined duration or longer.

3. The method for verifying an amount of a sample solution in accordance with claim 2,

wherein the step (b) is a step of detecting an inflow of said sample solution into said sample cell based on the fact that said absolute value has become a second predetermined value or greater, followed by verifying that said predetermined amount of said sample solution is held in

said sample cell based on the fact that said absolute value of an amount of change in said output signal per hour is maintained at the first predetermined value or less for the first predetermined duration or longer, after detecting said inflow.

4. The method for verifying an amount of a sample solution in accordance with claim 3,

wherein the second predetermined value is greater than the first predetermined value.

5. The method for verifying an amount of a sample solution in accordance with claim 1,

wherein the step (a) is a step of detecting a transmitted light component of a light by a photosensor while irradiating a sample solution, which is being injected into a sample cell, with said light, and the step (b) is a step of verifying that said predetermined amount of said sample solution is held in said sample cell based on the fact that said output signal has become a third predetermined value or greater.

6. The method for verifying an amount of a sample solution in accordance with claim 1,

wherein the step (a) is a step of detecting a scattered light component of a light by a photosensor while irradiating a sample solution, which is being injected into a sample cell, with said light, and the step (b) is a step of verifying that said predetermined amount of said sample

solution is held in said sample cell based on the fact that said output signal has become a fourth predetermined value or less.

7. The method for verifying an amount of a sample solution in accordance with claim 1,

wherein said sample solution is a urine, and the step (a) is a step of detecting at least one selected from the group consisting of a transmitted light component, a scattered light component and a reflected light component of a light by a photosensor while irradiating a urine, which is being injected into a sample cell provided in a hollow space of a toilet bowl, with said light.

8. A method for controlling a measurement system comprising the steps of:

(a) detecting at least one selected from the group consisting of a transmitted light component, a scattered light component and a reflected light component of a light by a photosensor while irradiating a sample solution, which is being injected into a sample cell, with said light;

(b) verifying that a predetermined amount of said sample solution is held in said sample cell based on a change in an output signal from said photosensor; and then

(c) measuring an optical characteristic of a sample solution.

9. The method for controlling a measurement system in accordance with claim 8, further comprising a step of:

verifying that said sample solution has become stable based on the fact that said absolute value of said amount of change in said output signal per hour is maintained at a fifth predetermined value or less for the second predetermined duration or longer, after the step (b) and before the step (c).

10. The method for controlling a measurement system in accordance with claim 9,

wherein the fifth predetermined value is less than the second predetermined value.

11. The method for controlling a measurement system in accordance with claim 8,

wherein said irradiated light in the step (a) is also used for measuring said optical characteristic in the step (c).

12. The method for controlling a measurement system in accordance with claim 8,

wherein said sample solution is transfused from said sample cell to another sample cell after the step (b), and the rest of the steps are conducted thereafter.

13. The method for controlling a measurement system in accordance with claim 8,

wherein the step (c) is a step of detecting a light, which has been transmitted through said sample solution and an analyzer, by a photosensor to measure an angle of rotation of said sample solution, using said output signal from said

photosensor as a transmitted light component.

14. The method for controlling a measurement system in accordance with claim 8, further comprising the steps of:

(d) discharging said sample solution from said sample cell after the step (c); and then

(e) washing said sample cell.

15. The method for controlling a measurement system in accordance with claim 14,

wherein the steps (d) and (e) are conducted simultaneously by replacing said sample solution in said sample cell with a cleaning solution.

16. The method for controlling a measurement system in accordance with claim 8,

wherein said sample solution is a urine, the steps (a) to (c) are conducted after said sample cell installed in a position closed to a side wall of a toilet bowl is moved into a hollow space of said toilet bowl, and the rest of the steps are conducted after said sample cell is restored to the initial position.

17. The method for controlling a measurement system in accordance with claim 8,

wherein said sample solution is a urine, the steps (a) and (b) are conducted after said sample cell installed in a position closed to a side wall of a toilet bowl is moved into a hollow space of said toilet bowl, and the rest of the steps are conducted after said sample cell is restored to the

initial position.

18. The method for controlling a measurement system in accordance with claim 16,

wherein a urine and/or a cleaning solution is discharged into a toilet bowl.

19. A method for measuring a concentration of a solution comprising the steps of:

(a) detecting at least one selected from the group consisting of a transmitted light component, a scattered light component and a reflected light component of a light by a photosensor while irradiating a sample solution, which is being injected into a sample cell, with said light;

(b) verifying that a predetermined amount of said sample solution is held in said sample cell based on a change in an output signal from said photosensor;

(c) measuring an optical characteristic of a sample solution after mixing a predetermined amount of a reagent with said sample solution, followed by measuring a concentration of a specific substance contained in said sample solution.

20. The method for measuring a concentration of a solution in accordance with claim 19,

wherein said step (c) is a step of measuring an angle of rotation of said sample solution to measure a concentration of an optically active substance contained in said sample solution, followed by measuring a concentration of a specific substance contained in said sample solution by

measuring an optical characteristic of said sample solution
after mixing therewith a predetermined amount of a reagent.